Supplementary Figure 1

Methods

Infrared measurements:

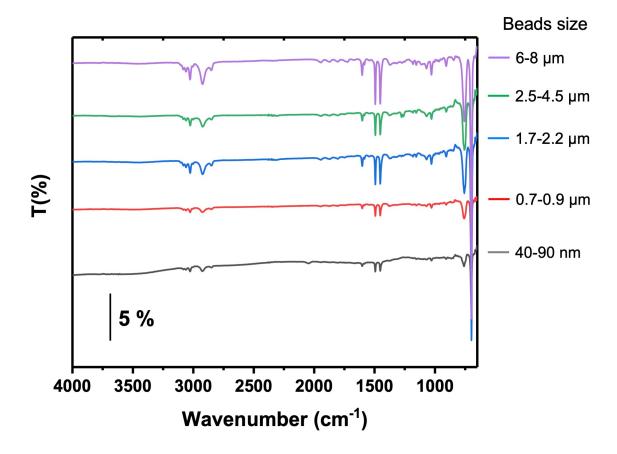
Infrared (IR) spectra were recorded with a PerkinElmer Spectrum 100 FT-IR spectrometer equipped with a Pike MIRacle attenuated total reflectance (ATR) module, in the 4000-600 cm⁻¹ range. For the measurements a Ge crystal was mounted on the ATR module.

Sample preparation:

 $500\mu l$ of polystyrene beads dispersion (1 or 2.5 mg/ml depending on the beads) were diluted in 1 ml EtOH and centrifuged at 15000g for 1 hour to pellet the beads. Two aliquots were needed for the 40-90 nm beads, which are sold as a 1 mg/ml dispersion. After centrifugation, all but $300~\mu l$ of the supernatant was removed and the beads dispersed in the remaining EtOH. $2.5~\mu L$ of the resulting suspension was drop-casted on the Ge crystal. The spectra were recorded after complete evaporation of the solvents, under mild pressure (built-in ATR press).

Results

The spectra, displayed below, show the characteristic peaks of polystyrene, as described in the literature (40).



Supplementary Figure 1: FTIR spectra of the polystyrene beads used in the study